IN THE SPECIFICATION:

Please amend the page 11 beginning at line 3 and ending at line 18 as follows:

[[An]] A first aspect of [[claim 1 of]] the present invention is an adaptive noise reduction method including an adaptive filter for obtaining a signal approximate to a periodic signal to be reduced from a reference input pulse signal in synchronism with the periodic signal to be reduced within a main input signal, and a composition means for subtracting the adaptive filter output signal from the main input signal, in which an output signal of the composition means is fed back to the adaptive filter, and the adaptive filter performs adaptation processing so that noise power of the output signal of the composition means may become minimum; the adaptive noise reduction method is provided with a ring-shaped memory constituting the adaptive filter, a read-address generator for generating read addresses of the ring-shaped memory, and a write-address generator for generating write addresses thereof, and to make a relative phase between the read address and the write address variable.

Please amend page 12 beginning at line 2 and ending at line 10 as follows:

According to [[an]] a second aspect [[of claim 2]] of the present invention, the relative phase between the read address and write address varies corresponding to the periodic change of the reference input pulse signal, so that the adaptive filter is formed of the ring-shaped memory and the pitch of a noise waveform to be reduced can be varied with ease by making the relative phase between the read address and write address vary. Thus, comparing with the conventional processing of fixed-period type noise reduction, it is possible to reduce an increase of circuits.

Please amend page 12 beginning at line 11 and ending at line 17 as follows:

According to [[an]] a third aspect of [[claim 3 of]] the present invention, the output signal of the adaptive filter is subtracted by composition means from the main input signal through data interpolation means, so that pitch-conversion accuracy can be improved for calculating data by interpolation processing, corresponding with relative phase position between the write address and read address.

Please amend the paragraph beginning on page 12 at line 18 and ending on page 13 at line 2 as follows:

According to [[an]] a fourth aspect [[of claim 4]] of the present invention, the number of taps (the number of words) M of the ring-shaped memory constituting the adaptive filter has a relation of $M \geqq S \cdot TM$, where S is a sampling frequency of the periodic signal to be reduced and TM is the maximum period which the reference input pulse signal can take, so that by always storing in memory the adaptive coefficients having the extent of one period of the maximum period, even in the case of a short period, it is possible to cope with only by changing the address position and to cause almost no renewal of adaptive coefficients.

Please amend page 13 beginning at line 2 and ending at line 18 as follows:

[[An]] A fifth aspect [[of claim 5]] of the present invention is an adaptive noise reduction apparatus including an adaptive filter for obtaining a signal approximate to a periodic signal to be reduced from a reference input pulse signal synchronous with the periodic signal to be reduced within a main input signal, and a composition means for subtracting an output signal of

the adaptive filter from the main input signal, in which an output signal of the composition means is fed back to the adaptive filter that performs adaptation processing so that noise power of the output signal of the composition means may become minimum; and the apparatus further includes a ring-shaped memory constituting the adaptive filter, a read-address generator for generating read addresses of the ring-shaped memory, and a write-address generator for generating write addresses thereof, in which relative phase between the read address and write address are made variable.

Please amend the paragraph beginning on page 13 at line 19 and ending on page 14 at line 2 as follows:

According to [[an]] a sixth aspect [[of claim 6]] of the present invention, the relative phase between the read address and write address varies corresponding to the periodic change of the reference input pulse signal, so that the adaptive filter is formed of the ring-shaped memory and the pitch of a noise waveform to be reduced can be varied with ease by making relative phase between the read address and write address vary. Thus, [[comparing]] compared with the conventional processing of fixed-period type noise reduction, it is possible to reduce an increase of circuits.

Please amend page 14 beginning at line 3 and ending at line 9 as follows:

According to [[the an]] a seventh aspect [[of claim 7]] of the present invention, the output signal of the adaptive filter is subtracted by composition means from the main input signal through data interpolation means, so that pitch-conversion accuracy can be improved for

calculating data by interpolation processing, corresponding with relative phase position between the write address and read address.

Please amend page 14 beginning at line 10 and ending at line 19 as follows:

According to [[an]] an eighth aspect [[of claim 8]] of the present invention, the number of taps (the number of words) M of the ring-shaped memory constituting the adaptive filter has a relation of $M \geqq S \cdot TM$, where S is a sampling frequency of the periodic signal to be reduced and TM is the maximum period which the reference input pulse signal can take, so that by always storing in memory the adaptive coefficients having the extent of one period of the maximum period, even in case of a short period, it is possible to cope with only [[by]] changing the address position and to cause almost no renewal of adaptive coefficients.